

REMARKS

Applicant's Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite because the last phrase recites "using a vase value and a gradient in both a and y directories" Applicant corrected as intended to say "in both x and y directions."

Claims 1,2 and 4 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Harkin et al. (U.S. Patent no. 5,999,200; hereinafter Harkin) in view of White , et al. (U.S. Patent no. 5,918,225; hereinafter White).

Applicant's claim 1 calls for" determining maximum and minimum values of index of normal table area of a lookup table, and expanding the lookup table above and below said maximum and minimum values of said index."

This is not taught in these references. The examiner acknowledges that Harkin does not disclose the step of determining the maximum and minimum values of index, and expanding the look up table opcodes." The examiner states that White teaches this at lines 51-52. Applicant's have examined the White reference and have not determined where this is shown on any lines 51-52. Applicant is not sure on what column of the 56 column this may be found. The applicant did find on column 51 a reference to expanding a lookup table so that it can store more than 256 entries. It simply increases the number of values. It does not teach expanding the lookup table above and below said maximum and minimum values of said index." In the abstract it discusses additional unique values are inserted into the column of the user's table. It says nothing about opcodes or expanding above or below the

maximum and minimum values of a normal table. White is a SQL-Based database and teaches nothing about enhancing the rendering of pixels in the case of opcode. For these reasons it is not seen where applicant's claimed invention would be obvious in view of these references.

Applicant's claims 2-4 dependent on claim 1 are deemed allowable for at least the same reasons as claim 1. Further claim 2 calls for the expanding step to include the step of replicating the highest value in the index is above the normal table area. This is neither taught nor suggested in either reference. There is no teaching in either reference as to the values of the index and more specifically to the values above the maximum limit is a replication of the highest value. The examiner suggests that this is inherent. There is no reason for it to be inherent for there is no suggestion of a value outside of the normal range. The only teaching the examiner is relying on is applicant's own teaching and that is proscribed hindsight reasoning. To suggest it is inherent since it is the closest to the actual index implemented in the normal range is not based on the reference but again is based on hindsight reasoning of applicant's teaching. There is nothing in the reference to suggest values outside the normal range. The examiner's argument is based on applicant's teachings and not those of the reference.

Claim 3 calls for the opcodes are for shading.

Claim 4 further calls for the expanding step includes the step of replicating the lowest value if the index is below the normal table area. There is no suggestion this in either reference.

Claims 5-6 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lung, et al (U.S. Patent No. 5,533,174; hereinafter Lung).

Lung describes a low cost page printer. As admitted by the examiner Lung does not disclose means for rendering to include a lookup table that includes opcode values over all of indexes wherein the index into the lookup table is calculated for every pixel using a base value and a gradient in both x and y directions. The examiner references Harkin to teach this but this is not taught in Harkin.

Applicant's claim 5 calls for "A printer comprising:

a printing device;


a printer controller for controlling said printing device, said printer controller including means for interpreting responsive to each of source language to translate into machine language and then execute and wherein a figure to be printed is divided into graphics rendering primitives and means for rendering where each and every pixel in the primitive is a function of its position the primitive, said means for rendering includes a lookup table that includes opcode values over all values of indexes wherein the index into the lookup table is calculated for every pixel using a base value and a gradient in both x and y directions; and said means for providing opcode values for all values of indexes includes determining maximum and minimum values of index of normal table area of a lookup table, and expanding the lookup table above and below said maximum and minimum values of said index by replicating the highest value if the index is above the normal table value and replicating the lowest value if the index is below the normal table area."

As discussed previously this is neither taught nor suggested in the Harkin or White references and is not taught in Lung. There is no provision for providing for all values of indexes, there is no teaching of determining maximum and minimum values of the index and no teaching of replicating the highest value if the index is above the minimum value and replicating the lowest value if the index is below the minimum value. As states in the background of the patent application without this teaching delay in the time for rendering pixels occur because of the time taken to access outside the lookup table area. Claim 5 is therefore deemed allowable over these references.

Claim 6 (as amended) calls for "a lookup table for the entire range of index values; said lookup table of said rendering subsystem has its highest and lowest values replicated above and below the normal table indexes so as to provide lookup table values for the entire range of indexes.

As discussed previously this is not taught or suggested in the references.

Since there is no other reason for rejection applicant's claims 1-6 are deemed allowable and an early notice of allowance is deemed in order and is respectfully requested.

Respectfully requested;

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